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DOOR CONSTRUCTION

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5 Claims. (Cl. 20—16)

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The present invention relates to a novel door construction.

More particularly the present invention relates to a door construction especially adapted for vertically pivoted heavy glass doors and designed to prevent injury therefrom.

The heavy, transparent glass door provided with pivots extending upwardly and downwardly from the upper and lower edges thereof has become increasingly popular, especially in store construction. A door of this type is usually provided with a spring closure member operating upon the pivots which are usually located a few inches from the inner edge thereof and extending from the upper and lower edges. The use of doors of this type has resulted in considerable danger to children especially, who may insert their fingers between the edge of the door and the jamb and upon closure thereof substantial injury may result. Providing a guard member which will prevent this injury presents a considerable problem inasmuch as the glass of the door is usually tempered and thereafter no means can be provided upon the door itself which would involve the drilling thereof.

It is one of the objects of the present invention, therefore, to provide a novel door construction, including a guard member inserted in the jamb of a door of the character described and extending to a substantial distance in a lateral direction from the general plane of said door when in closed position so as to prevent injury to an object interposed between the edge of the door and the jamb.

A second general object of the present invention is to provide a guard member of the character described which will be resilient in character and compressible so as to permit the insertion of a finger or other object between the door and jamb thereof and which will receive the object referred to upon door closure so as to prevent injury thereof.

A third general object of the present invention is to provide a guard member of the character described as part of a door jamb construction, which may be readily combined with the conventional jamb and the conventional tempered glass door.

Other objects and advantages of the present invention will become apparent from the subsequent description and figures of the drawing, wherein:

Fig. 1 is a perspective view of a door and jamb construction in accordance with the present invention;

Fig. 2 is a section taken generally along the line 2—2 of Fig. 1;

Fig. 3 is a section taken generally along the line 3—3 of Fig. 1;

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Fig. 4 is a section taken generally along the line 4—4 of Fig. 1;

Fig. 5 is a detail enlarged section of a portion of the construction shown in Fig. 2 illustrating the action of the guard member; and

Fig. 6 is a section similar to Fig. 2 but illustrating a modification of the present invention.

Referring to the figures of the drawing, and particularly Fig. 1, a tempered glass door of a conventional type is disclosed at 10. The door is supported as by channel members 11 and 12 at its upper and lower ends, respectively. Extending downwardly from the channel member 11 is a pivot member 13 and extending upwardly from the channel member 12 is a pivot member 14, these pivot members extending downwardly through the sill 15 and upwardly so as to support the door for swinging movement thereabout. The door construction, as shown, is provided with a jamb 16 which may be suitably made from sheet metal or other material. The face of the jamb adjacent the door is provided with a recess 17 which extends upwardly and downwardly the full length of the jamb and is preferably provided with inwardly extending edge portions 18 and 19 which serve to retain therein a suitable guard member preferably composed of a sheet of sponge rubber and indicated at 20.

As best shown in Fig. 2 the guard member 20 extends laterally from the plane of the door 10 substantially the entire width of the jamb. This insures protection to a finger, as best shown in Fig. 5, or other object if interposed between the door 10 and the jamb when the door is in the open position.

In Fig. 6 a modified form of the guard member is shown, which is made of a single sheet of a suitable, thin spring metal and indicated at 21, the spring metal guard member 21 being received within a modified recess 22 in the door jamb 23. Here again, upon the insertion of an object between the door 10 and the jamb the guard member 21 would yield to prevent injury.

I claim:

1. A door construction comprising a swinging door, a door jamb having a width substantially greater than said door, vertically aligned pivot members at the upper and lower ends of said door, the axis of said pivot members being spaced from said jamb, yieldable guard means on the face of said jamb adjacent said door, said guard means extending laterally in each direction from the general plane of said door in closed position for substantially the entire width of said jamb whereby said yieldable guard means serves to prevent injury to an object interposed between the edge of